ST. CHARLES COUNTY
HIGHWAY DEPARTMENT

I do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2), this patented or proprietary item is essential for synchronization with existing highway facilities.

Eric F Schroeter

State Design Engineer
Eric F Schroeter

Memorandum

DATE: October 18, 2013

TO: Laura Ellen, District Design Liaison

FROM: Ron Sage, Highway Traffic Engineer

SUBJECT: Design, Public Interest Finding
Minor Traffic Signal Upgrades Project, St. Charles County
Job No. CMAQ-7302(642)

Saint Charles County requests approval of a finding in the public interest to use the equipment mentioned below for the above mentioned project. The scope of this project is to provide minor traffic signal upgrades that are compliant with current standards, in addition to being compliant with the GGL – Gateway Green Light project Phase 1 & 2, CMAQ-5414(616) & CMAQ-7302(638). The GGL project is replacing over 300 traffic signal controllers in Saint Charles County and has begun the implementation of a centralized software program called Transcore TransSuite. County/MoDOT software servers and contracted workers will manage signal operations at the MoDOT TMC in Chesterfield once phase 1 is accepted. Phase 2 is currently being final designed for submittal to MoDOT/you for review.

The only local traffic signal equipment suppliers who have offices and support staff in this area are Brown Traffic Products and Traffic Control Corporation. They are factory distributors for Siemens and Econolite respective. The following specified controller assembly backpanels would allow these two local suppliers to bid competitively with interested contractors:

1. NEMA TS2 Controller, National Transportation Communications for ITS Protocol - NTCIP compliant; Siemens controller model 3468M52 or Econolite controller model number ASC/3-1000.

The Ethernet LAN switches supplied on the GGL phase 1 project are all manufactured by Cisco. The powerful layer 3 Cisco server switches, providing internet hardware firewalls and communication traffic management using Transcore TranSuite software, are in use at the MoDOT TMC. Unfortunately, Cisco switches are only completely compatible with other Cisco switches. We have shown on the plans for this project where Cellular modems will continue to be utilized to remove and replace reprogrammed existing Cisco switches; model number ASA5505-BUN-K9. In order to be compatible with the same switches provided for every existing traffic signal in Saint Charles County, and those to be installed in the near future by the GGL2 project, we ask for your approval to utilize new switches #A and #B due to assured compatibility within the centralized traffic signal system. These new switches will be used to replace cellular communications with fiber optic communications. Switch #A has two single mode fiber optic gigabit ports house within an extreme environment rated device. Switch #B has three single mode fiber optic gigabit ports and is capable of housing four, something that is not offered by Cisco at this time in a reasonably priced Layer 2 device. Please see the attached email showing the recommendations of the GGL2 consultant GBAs and the City of Saint Peters IS department. Switch #A and #B are specified as follows:

1. Switch #A (Quantity 2): The new Ethernet LAN Switch #A to be used at County maintained controller assemblies shall be a **Cisco IE-3000-8TC**.
2. Switch #B (quantity 1): The new Ethernet LAN Switch #B to be used at the Saint Peters maintained Mid Rivers Mall Drive signal shall be a **Comtrol RocketLinx™ ES9528-XT**.

Thank you for your time and consideration of this Public Interest Finding. The County seeks MoDOT approval of this request at its earliest convenience.

Approved by:

_____ Date_____

_____ Date _____